## Claims:

1. (Previously presented) A method for treating a skin microcirculatory disorder (SMD) comprising topically administering a hydroxypyridonone of formulae (I-III):

wherein

 $R^1$  represents a  $(C_1-C_{10})$ -alkyl,  $(C_1-C_{10})$ -alkenyl,  $(C_1-C_{10})$ -alkoxy,  $(C_1-C_{10})$  hydroxyalkyl,  $(C_5-C_{12})$ -aralkyl,  $(C_3-C_{12})$ -cycloalkyl,  $(C_1-C_8)$ - carboalkoxy or  $(C_1-C_8)$ - carbamyl, or a  $(C_{10}-C_{30})$ -peptide, or a  $(C_1-C_8)$ -polyol or monosaccharide;

 $R^2$  represents an hydrogen atom or a linear or branched, saturated or unsaturated lo  $(C_l$ - $C_{22})$ -acyl, optionally substituted by  $(C_l$ - $C_8)$ -alkoxy, carboxy,  $(C_l$ - $C_8)$  alkoxycarbonyl, amino, hydroxy, said amino and hydroxy being optionally  $(C_l$ - $C_{22})$ -acylated or - alkylated;

 $R^3$ ,  $R^4$  and  $R^5$ , each individually, represent a hydrogen atom, or  $(C_1\text{-}C_{10})$ -alkyl,  $(C_1\text{-}C_{10})$ - alkenyl,  $(C_1\text{-}C_{10})$ -alkoxy,  $(C_5\text{-}C_{12}$  aryl) alkyl,  $(C_5\text{-}C_{12}$  )-cycloalkyl,  $(C_1\text{-}C_8$  carbo)-alkoxy or  $(C_1\text{-}C_8)$ -carbamyl group;

with the proviso that both R<sup>1</sup> and R<sup>3</sup> are not hydrogen;

or a dermatologically/cosmetically acceptable salt thereof.

- (Previously presented) A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is rosacea.
- (Previously presented) A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is cutaneous vasculitis.
- (Previously presented) A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is actinic purpura.
- (Previously presented) A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is a skin capillaritis.
- 6.(Previously presented) A method according to claim 8, wherein the skin capillaritis is, purpura annularis telangiectodes, contact allergy skin capillaritis, itching purpura, or eczematidlike purpura.

## 7. (Cancelled)

- 8. (Withdrawn) A method according to claim 1, wherein  $R^1$  and  $R^2$  are methyl,  $R^3$  and  $R^4$  are hydrogens.
- 9. (Withdrawn) A method according to claim 1, wherein  $R^1$  and  $R^2$  are ethyl  $R^3$  and  $R^4$  are hydrogens.

10. (Withdrawn) A method according to claim 1, wherein  $R^1$  is  $CH_2CH_2OH$ ,  $R^2$  is methyl or ethyl, and  $R^3$  and  $R^4$  are hydrogens.

11. (Previously presented) A method for the treatment of skin microcirculatory disorder (SMD) comprising locally applying to a mammal in need thereof of a therapeutically effective amount of hydroxypyridonone compound of formulae (I-III):

wherein

$$\begin{split} R^{l} \text{ represents a } &(C_{l}\text{-}C_{l0})\text{- alkyl, } (C_{l}\text{-}C_{l0})\text{- alkenyl, } (C_{l}\text{-}C_{l0})\text{- alkoxy, } (C_{l}\text{-}C_{l0}) \text{ hydroxyalkyl, } (C_{5}\text{-}C_{12})\text{- aralkyl, } (C_{3}\text{-}C_{12})\text{- carboalkyl, } (C_{1}\text{-}C_{8})\text{- carboalkoxy or } (C_{1}\text{-}C_{8})\text{- carbamyl, or a } (C_{10}\text{-}C_{30})\text{- peptide or a } (C_{3}\text{-}C_{0}) \text{ polyol or monosaccharide;} \end{split}$$

 $R^2$  represents an hydrogen atom or a linear or branched, saturated or unsaturated ( $C_{I^*}C_{22}$ )-acyl, optionally substituted by ( $C_{I^*}C_{S}$ )-alkoxy, carboxy, ( $C_{I^*}C_{S}$ ) alkoxycarbonyl, amino, hydroxy, said amino and hydroxy being optionally ( $C_{I^*}C_{22}$ )-acylated or - alkylated;

 $R^3$ ,  $R^4$  and  $R^5$ , each individually, represent a hydrogen atom, or  $(C_1\text{-}C_{10})$ -alkyl,  $(C_1\text{-}C_{10})$ - alkenyl,  $(C_1\text{-}C_{10})$ -alkoxy,  $(C_5\text{-}C_{12}$  aryl) alkyl,  $(C_5\text{-}C_{12}$  )-cycloalkyl,  $(C_f\text{-}C_8$  carbo)-alkoxy or  $(C_f\text{-}C_8)$ -carbamyl group;

with the proviso that both R1 and R3 are not hydrogen;

or a dermatologically/cosmetically acceptable salt thereof

in admixture with a dermatologically/cosmetically acceptable carrier.

- (Previosly presented) A method according to claim 11, for the treatment of rosacea, cutaneous vasculitis, or actinic purpura.
- 13. (Previously presented) A method according to Claim 11, for the treatment of itching purpura, purpura annularis telangiectodes or contact allergy skin capillaritis.
- 14. (Previously presented) A method according to Claim 11, for the treatment of traumatic skin haemorrhage or actinic purpura.
- 15. (Withdrawn) A method according to claim 11, wherein  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$ , each individually, represent a hydrogen atom.
- 16. (Previously presented) A method according to claim 11, wherein R<sup>1</sup> and R<sup>3</sup> each individually, represent (C<sub>1</sub>-C<sub>4</sub>)- alkyl, hydroxyalkyl or alkoxy.
- 17. (Withdrawn) A method according to claim 11, wherein said R² acyl group is formed by unbranched, naturally occurring caprylic acid, cupric acid, lauric acid, myristic acid, palmitic acid, palmitoleic acid, stearic acid, oleic acid, vaccenic, linoleic acid, alpha-linolenic acid, eleostearic, delta-linolenic acid, gondoic acid, dihomo-y-linolenic acid, arachidonic acid, eicosapentaenoic acid, docosapentaenoic acid, docosapentaenoic acid, docosapentaenoic, docosahexacuoic acid, nervonic or a mixture thereof.

18. (Withdrawn) A method according to claim 11, wherein said  $R^2$  acyl is a  $C_{1.8}$  which is branched at the carbon atom adjacent to the carbonyl group.

19. (Previously presented) A method according to claim 11, wherein said hydroxypyridonone is 1, 2 dimethyl-3-hydroxy-4-pyridinone (deferiprone); 1,2-diethyl-3- hydroxy-4-pyridinone; 1-methyl-2-ethyl-3-hydroxy-4-pyridinone or 1-methyl-2-(2-methoxy-ethyl)-3-hydroxy-4-pyridinone.

20. (New) A method for treating skin capillaritis, cutaneous vasculitis, itching purpura, purpura annularis telangiectodes, contact allergy skin capillaritis, traumatic skin hemorrhage or actinic purpura. comprising topically administering a hydroxypyridonone of formulae (I-III):

wherein

$$\begin{split} R^l \text{ represents a } &(C_1\text{-}C_{10})\text{- alkyl, } (C_1\text{-}C_{10})\text{- alkenyl, } (C_1\text{-}C_{10})\text{- alkoxy, } (C_1\text{-}C_{10})\text{ hydroxyalkyl, } (C_5\text{-}C_{12})\text{- aralkyl, } (C_3\text{-}C_{12})\text{- cycloalkyl, } (C_1\text{-}C_8)\text{- carbamyl, or a } (C_{10}\text{-}C_{30})\text{- peptide },\\ \text{or a } &(C_3\text{-}C_6)\text{ polyol or monosaccharide;} \end{split}$$

 $R^2$  represents an hydrogen atom or a linear or branched, saturated or unsaturated lo  $(C_I\text{-}C_{22})$ -acyl, optionally substituted by  $(C_I\text{-}C_8)$ -alkoxy, carboxy,  $(C_I\text{-}C_8)$  alkoxycarbonyl, amino, hydroxy, said amino and hydroxy being optionally  $(C_I\text{-}C_{22})$ -acylated or - alkylated;

 $R^3$ ,  $R^4$  and  $R^5$ , each individually, represent a hydrogen atom, or  $(C_1-C_{IO})$ -alkyl,  $(C_1-C_{IO})$ -alkenyl,  $(C_1-C_{IO})$ -alkoxy,  $(C_5-C_{12}$  aryl) alkyl,  $(C_5-C_{12})$ -cycloalkyl,  $(C_1-C_8)$ -carbonyl group;

with the proviso that both R<sup>1</sup> and R<sup>3</sup> are not hydrogen;

or a dermatologically/cosmetically acceptable salt thereof.